

**BY ORDER OF THE CHIEF,
NATIONAL GUARD BUREAU**

MANPOWER STANDARD 22C1A2

28 AUGUST 2003

Manpower Standard

SORTIE SUPPORT ELEMENT



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the process oriented description (POD) for varying levels of workload in the 189th Airlift Wing whose mission it is to provide aircrew training for students from each branch of the military that flies the C-130 aircraft and from 27 foreign countries. This standard applies to the 189th Airlift Wing, Little Rock Air Force Base, Arkansas, and encompasses all major processes performed within the Sortie Support Element function. It does not apply to any other units. This standard is applicable to peacetime operations only. The Air National Guard (ANG) is authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the Sortie Support Element. This standard was developed in accordance with AF Instruction (AFI) 38-201, *Determining Manpower Requirements*, and AF Manual (AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP) Processes*, and AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*. Send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through channels, to ANG, Management Engineering Branch (ANG/XPME/Operating Location TN [OLTN]), 106 Briscoe Drive, McGhee Tyson Air National Guard Base TN 37777-6283.

1. STANDARD DATA:

- 1.1. Man-hour Data Sources. The Operational Audit (historical record and technical estimate) technique was used to collect/determine man-hour/manpower data.
- 1.2. Standard Manpower Equation. $Y = 17.69 + 43.42X$
- 1.3. Workload Factor:
 - 1.3.1. Title. X = Primary Aircraft Inventory (PAI)

1.3.2. Definition. Number of PAI authorized to support the unit training mission.

1.3.3. Source. USAF Programming Document (PD), Volume 2, maintained by NGB/FM.

1.4. Points of Contact:

1.4.1. Functional: Col John J Samuhel, 189 MX/CC

1.4.2. Manpower: George W. Tatum III, ANG/XPME/OLTN

2. Application Instructions:

2.1. Equation. Apply the equation in paragraph 4.2. to determine the required man-hours.

2.2. Man-Hour Availability Factor (MAF). Divide the resulting man-hours by the appropriate MAF/overload factor. The answer, rounded up, will quantify the required manpower.

2.3. Upper and Lower Extrapolation Limits:

2.3.1 $Y_U = 456.305$

2.3.2 $Y_L = 273.783$

3. STATEMENT OF CONDITIONS. The normal hours of operation for this function are 80 hours per two-week period. The alternate work schedule of eight nine hour days, and one eight hour day is the norm. No environmental, equipment, or facility conditions affect this Manpower Standard.

DANIEL JAMES III, Lieutenant General, USAF
Director, Air National Guard

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION***References*

AFI 38-201 *Determining Manpower Requirements*

AFMAN 38-208, Volume 1, *Air Force Management Engineering Program (MEP)-Process*

AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP)-Quantification Tools*

AFMS 00AA, *Standard Indirect Description*

Abbreviations and Acronyms

AF--Air Force

AFI--Air Force Instruction

AFMAN--Air Force Manual

AFMS-- Air Force Manpower Standard

AGE--Aerospace Ground Equipment

ANG--Air National Guard

ANG/XPME--Air National Guard Management Engineering Branch

ANGMS--Air National Guard Manpower Standard

BPO--Basic Post flight

CTK--Composite Tool Kit

FCF--Functional Check Flight

MAF--Man-Hour Availability Factor

MEP--Management Engineering Program

MSDS--Material Safety Data Sheets

MSI--Manpower Standards Implementation

OTI--One-Time Inspections

PAI--Primary Aircraft Inventory

PD--Programming Document

PDM--Periodic Depot Maintenance

POD--Process Oriented Description

TCTO--Time Compliance Technical Order

UMD--Unit Manpower Document

UTA--Unit Training Assembly

Terms

Air National Guard Manpower Standard (ANGMS)--A numbered, specialized publication that quantifies manpower requirements for a work center, it also includes approved variances. See AFI 38-201.

Man-Hour--A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Manpower Standard--The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

Process Oriented Description--A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

Attachment 2

**PROCESS ORIENTED DESCRIPTION
MAINTENANCE OPERATIONS CENTER**

Table A2.1. Listing of Functional Processes.

1.	PERFORM PROPERTY CUSTODIAN DUTIES. Conducts annual inventory, maintain inventory records, order replacement equipment, and complete turn-in requests.
2.	MAINTAIN COMPOSIT TOOL KIT (CTK). Completes daily accountability inventory, repair/replace damaged or worn tools as needed.
3.	MAINTAINS BENCH STOCK. Monitor bench stock inventory to assure quantities meet usage requirements. Reorder bench stock as needed.
4.	ACCOMPLISHES TIME COMPLIANCE TECHNICAL ORDER (TCTO). Accomplishes directed TCTO and completes documentation.
5.	PERFORMS ONE-TIME INSPECTIONS (OTI). Performs and documents higher headquarters or Logistics Group Commander directed one-time inspection. Reviews and updates AFTO Form 781, <i>ARMS Aircrew/Mission Flight Data Document</i> .
6.	MAINTAINS TECHNICAL ORDER FILE. Technical Order files are updated as changes are received to assure proper maintenance procedures.
7.	PERFORM SCHEDULED INSPECTIONS. Complete scheduled inspections on Isochronical maintenance stands, towbars, fuel bowers, hazmat spill kits, radome dolly, and dual rail latch tester. Perform repairs as needed.
8.	PERFORMS EMERGENCY EQUIPMENT MAINTENANCE. Inspects hand held Halon fire extinguishers, perform annual weight checks, complete 6 & 12 year inspections. Inspect first aid kits and coordinate with unit medical clinic to obtain updated kits. Inspect emergency exit lights. Inspect oxygen walk-around bottles and order replacements as needed. Coordinates with Electro-Environmental for the repair/replacement of regulators.
9.	AIRCRAFT -21 EQUIPMENT: Inspect and repair as necessary.
9.1.	MAINTAIN EQUIPMENT:
9.1.1.	INSPECT AIRCRAFT TROOP SEATS.
9.1.2.	INSPECT STATIC LINE RETRIEVER WINCHES.
9.1.3.	INSPECT CARGO WINCHES.
9.1.4.	INSPECT LITTER STANCHIONS.
10.	COMPLETES ACCEPTANCE INSPECTIONS. Complete -21 inventory as part of aircraft acceptance inspection. Completes transfer documents and updates inventory records.

11.	PERFORM AIRCRAFT HOME STATION CHECK INSPECTION. Accomplish look-phase and fix-phase tasks. Review/update AFTO Form 781.
12.	ACCOMPLISH GROUND HANDLING TASKS:
12.1.	TOW AND POSITION AIRCRAFT.
12.2.	ASSIST DURING AIRCRAFT JACKING.
13.	PREPARE FOR COLD WEATHER OPERATIONS. Perform monthly inspection of deicing vehicles. Conduct training sessions on deicing operation and safety. Coordinate with 314th POL to refill vehicles with deicing fluid. Maintain tech data for the repair of deicing vehicles.
14.	PREPARE AIRCRAFT FOR PERIODIC DEPOT MAINTENANCE (PDM):
14.1.	REMOVE ALL -21 EQUIPMENT NOT REQUIRED FOR PDM INPUT.
14.2.	STORES -21 EQUIPMENT.
14.3.	PREPARES AIRCRAFT SHIPPING DOCUMENT.
14.4.	UPDATES INVENTORY RECORDS.
14.5.	ACCOMPLISHES REFURBISHMENT OF -21 EQUIPMENT.
14.6.	DOCUMENTS RECORDS.
14.7.	RESTORES AIRCRAFT TO NORMAL CONFIGURATION.
15.	PERFORM SCHEDULED AND UNSCHEDULED MAINTENANCE. Respond to crew chief requests for repair to dual rail/-21 equipment discrepancies. Perform ISO inspections on both dual rail and -21 equipment. Accomplish total refurbishment of dual rails when aircraft is at PDM including disassembly, repair, and rebuilding individual system components. Complete refurbishment of troop seats is accomplished while aircraft is at PDM.
16.	ORDER PARTS. Research part/stock number, order via computer, monitor status and receive parts. Review and update automated/manual records.
17.	INPUT MAINTENANCE DATA. Records maintenance action in aircraft forms, CAMS, and AFTO forms.
18.	PERFORM HAZARDOUS MATERIAL PROGRAM DUTIES. Initiate, submit, and maintain hazardous waste requests. Search the internet for applicable Material Safety Data Sheets (MSDS) for hazardous waste material. Provide and maintain a satellite accumulation point for reclaimable JP-8. Attends annual refresher training.
10.	INDIRECT. Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are: Administers Civilian, Officer, and Enlisted Personnel; Directs Work Center Activity; Provides Administrative Support; Prepares for and Conducts/Attends Meeting; Administers Training; Manages Supplies; Maintains Equipment; and Performs Cleanup.

Attachment 3**MANPOWER TABLE****A3.1. Standard Manpower Table**

Air Force Specialty Title	AFSC	Grade	Manpower Requirement	
Aerosp Mech	2A5XX	Civ	2	3
Total			2	3

Note. AFSCs may be adjusted at the discretion of the Commander.